USGS science for a changing world

Earthquake Shaking Green Alert

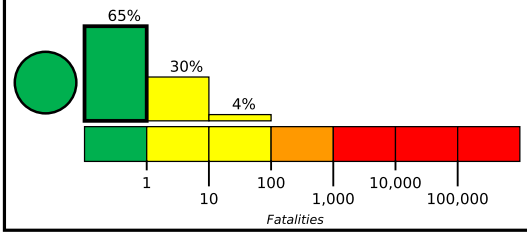
GSN ANSS USAID FROM THE AMERICAN PEOPLE

M 6.9, 34 km ENE of Aras-asan, Philippines

Origin Time: 2023-12-03 19:49:36 UTC (Mon 03:49:36 local)
Location: 8.9535° N 126.6186° E Depth: 28.6 km
FOR TSUNAMI INFORMATION, SEE: tsunami.gov

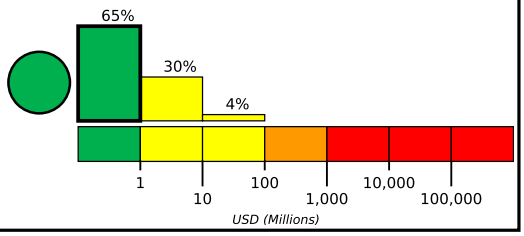
PAGER Version 7
Created: 1 week, 2 days after earthquake

Estimated Fatalities



Green alert for shaking-related fatalities and economic losses. There is a low likelihood of casualties and damage.

Estimated Economic Losses

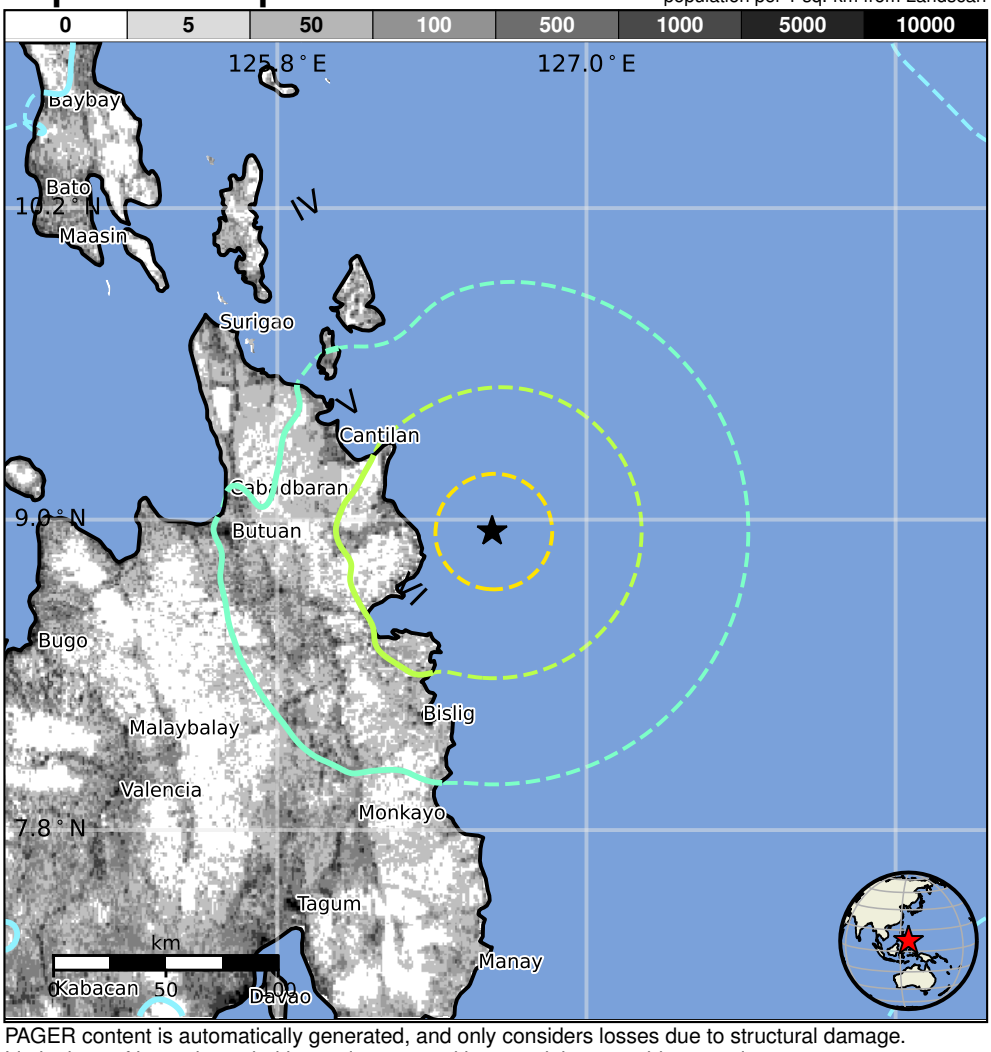


Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k=x1000)		–*	64k*	9,720k	1,724k	321k	0	0	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY		I	II-III	IV	V	VI	VII	VIII	IX	X+
PERCEIVED SHAKING		Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	Resistant Structures	None	None	None	V. Light	Light	Moderate	Mod./Heavy	Heavy	V. Heavy
	Vulnerable Structures	None	None	None	Light	Moderate	Mod./Heavy	Heavy	V. Heavy	V. Heavy

*Estimated exposure only includes population within the map area.

Population Exposure



Structures

Overall, the population in this region resides in structures that are a mix of vulnerable and earthquake resistant construction. The predominant vulnerable building types are unknown/miscellaneous types and heavy wood frame construction.

Historical Earthquakes

Date (UTC)	Dist. (km)	Mag.	Max MMI(#)	Shaking Deaths
1999-12-15	347	4.8	VI(34k)	1
1987-05-23	162	5.7	VII(70k)	1
1989-12-15	65	7.5	VIII(1k)	2

Recent earthquakes in this area have caused secondary hazards such as landslides that might have contributed to losses.

Selected City Exposure

from GeoNames.org

MMI	City	Population
VI	Bayabas	<1k
VI	Cagwait	<1k
VI	Aras-asan	5k
VI	Bacolod	2k
VI	Marihatag	4k
VI	La Paz	2k
V	**Butuan**	**310k**
V	Libertad	250k
IV	Magugpo	233k
IV	**Davao**	**1,213k**
IV	Cagayan de Oro	445k

bold cities appear on map. (k=x1000)

PAGER content is automatically generated, and only considers losses due to structural damage. Limitations of input data, shaking estimates, and loss models may add uncertainty.
https://earthquake.usgs.gov/earthquakes/eventpage/us7000lfxx#pager

Event ID: us7000lfxx